LESSON TITLE: END OF COURSE COMPREHENSIVE TEST (EOCCT)

TASK NUMBER: All previously taught tasks.

A. TRAINING OBJECTIVE.

TASK: Pass the EOCCT.

CONDITIONS: Given an examination booklet, pencil, DD Form 1970 (or ULLS generated DA Form 5987-E), DA Form 2404 (or ULLS generated DA Form 5988-E), TM 9-2320-272-10, equipment records folder, rags, lubricants, coolant, an M939 series cargo truck with BII, road test route, and a suitable off road training area. When testing for trailer operations, additional requirements are appropriate trailer operator's TM and a trailer coupled to an M939 series cargo truck.

STANDARD: Pass all written and performance tests.

B. INTERMEDIATE TRAINING.

Intermediate Training Objective 1

TASK: Pass a written examination.

CONDITIONS: Given an examination booklet and pencil.

STANDARD: Answer correctly 21 of 30 questions within 40 minutes. Use either the primary written test or the alternate written test.

Intermediate Training Objective 2

TASK: Pass the driver's road test.

CONDITIONS: Given DD Form 1970 (or ULLS generated DA Form 5987-E), DA Form 2404 (or ULLS generated DA Form 5988-E), pencil, TM 9-2320-272-10, equipment records folder, rags, lubricants, coolant, road test route, an M939 series cargo truck with BII, and road test route. When testing for trailer operations, additional requirements are appropriate trailer operator's manual and a trailer coupled to an M939 series cargo truck.

STANDARD: Achieve a score of 75 or higher. Use the driver's performance test (road test) instructions and the driver's road test score sheet (DA Form 6125-R).

Intermediate Training Objective 3

TASK:	Drive the M939 series cargo truck off road.
CONDITIONS:	Given DD Form 1970 (or ULLS generated DA Form 5987-E), DA Form 2404 (or ULLS generated DA Form 5988-E), TM 9-2320-272-10, equipment records folder, rags, lubricants, coolant, a suitable off road training area, an M939 series cargo truck with BII, and a requirement to operate the truck off road (to include ditches, marshes, gullies, ravines, steep grades, woods, mud, rocky terrain, and shallow streams [30 inches or less]) during daylight hours. When testing for trailer operations, additional requirements are appropriate trailer operator's manual and a trailer coupled to an M939 series cargo truck.
STANDARD:	Operate the vehicle safely at reduced speeds, taking precautions not to damage the truck while driving over rough terrain and receive all GOs on the performance test checklist.

C. ADMINISTRATIVE INSTRUCTIONS.

1. Training time: As scheduled.

2. Training location: Classroom, motor pool, road test route, and off road training area(s) as scheduled.

3. Training type: Performance evaluation.

4. Students: Scheduled personnel.

5. Principal and assistant instructors required: One primary instructor for the class for the written tests and one assistant instructor for every student for the performance tests.

6. Training aids and equipment: Hearing protection, rags, lubricants, coolant, examination booklet, pencil, DD Form 1970 (or ULLS generated DA Form 5987-E), DA Form 2404 (or ULLS generated DA Form 5988-E), DA Form 6125-R, TM 9-2320-272-10, equipment records folder, and an M939 series cargo truck with BII for every student. When testing for trailer operations, additional requirements are appropriate trailer operator's manual and a trailer coupled to an M939 series cargo truck.

7. References: AR 385-55, AR 600-55, DA Pamphlet 738-750, FM 21-305, TM 9-2320-272-10, and appropriate trailer operator's manual.

D. SEQUENCE OF ACTIVITY.

1. Introduction:

    a. Interest device.

b. Tie-in.

c. Lesson objective (paragraph A).

d. Procedures.

(1) Performance testing.

(2) Evaluation.

(3) Summary.

2. Performance testing:

NOTE: The driver will test in the order listed below and will not do the next test until he successfully passes the previous test.

a. Intermediate training objective 1 (written test).

b. Intermediate training objective 2 (road test).

c. Intermediate training objective 3 (off road driving without trailer).

3. Evaluate: Check written test results, road test score sheets, and performance test checklists.

4. Summary:

a. Recap main points.

b. Allow for questions.

c. Clarify questions.

d. Give closing statement.

5. Retraining: Retrain and retest NO-GOs.

E. SAFETY RESTRICTIONS.

1. Ensure that all chock blocks are in place when vehicles are parked or maintenance is to be performed.

2. Ensure the transmission is in N, the parking brake is set, and the engine is shut off before leaving the vehicle, when the vehicle is parked, or maintenance is being performed.

3. Ensure all personnel remove all wristwatches, rings, bracelets, ID tags, neck chains, and any other jewelry before working in or around the vehicle.

4. Ensure all personnel pay particular attention to the cautions and warnings listed in the operator's manual.

5. Ensure the driver and ground guides know and understand the hand and arm signals, especially the signal to stop, as outlined in FM 21-305.

6. Ensure ground guide(s) are used when backing.

7. Ensure all backing is conducted at a speed of 5 MPH or less.

8. Hearing protection is required for all personnel working in and around the vehicle while the engine is running.

9. Inspect all seat belts for damage and ensure all occupants wear seat belts while the vehicle is in operation.

10. Ensure personnel maintain at least three points of contact when mounting or dismounting the vehicle (to include performing PMCS).

11. Ensure all personnel are clear of vehicle before engine start is attempted. Operator must visually check to see that all areas of the truck are clear of personnel before attempting to start the engine. Failure to do so could result in serious injury or death to personnel.

12. Extreme care should be taken when removing the surge tank filler cap if the temperature gauge reads above 175° F. Steam or hot coolant under pressure will cause injury such as serious burns.

13. The exhaust pipe and muffler can become very hot during vehicle operation. Be careful not to touch these parts with your bare hands or allow the body to come in contact with the exhaust pipe or muffler. Exhaust system parts can become hot enough to cause serious burns.

14. Reemphasize the removal of all jewelry such as rings, ID tags, or bracelets before working around batteries. Be careful not to short out battery terminals. If jewelry or tools contact the battery terminal, a direct short may occur resulting in instant heating, damage to equipment, or injury to personnel. Do not smoke or use open flame near batteries. Batteries may explode from a spark. Battery acid is harmful to skin and eyes.

15. Fuel is very flammable and can explode easily. To avoid serious injury or death, keep fuel away from open fire and keep a fire extinguisher within easy reach when working with fuel. Do not work on the fuel system when the engine is hot. Fuel can be ignited by the hot engine. When working with fuel, post signs that read: "NO SMOKING WITHIN 50 FEET OF VEHICLE".

16. Alcohol used in alcohol evaporator is flammable, poisonous, and explosive. Do not smoke when adding fluid and do not drink fluid. Failure to do this will result in injury or death.

17. Do not use hand throttle while driving. When brakes are applied, the hand throttle does not automatically disengage. Using the hand throttle as a cruise control device could result in injury or death.

18. Apply brakes gradually when slowing or stopping and pump brakes gradually when slowing or stopping the vehicle on ice, snow, or wet pavement. A panic stop will cause the vehicle wheels to lock and the engine to stall. Power steering will be lost. Failure to apply brakes gradually can result in injury or death.

19. Rapid operation repeatedly of service brakes will consume compressed air supply and cause automatic spring brake application. Failure to follow proper service brake operating procedures may cause serious injury or death to personnel.

20. Never use the parking brake for normal braking. The wheels will lock up causing a severe skid. A skidding vehicle could result in serious injury or death.

21. Excessive use of the service brake to control downhill speed will result in the loss of braking power because of heat buildup.

22. Do not put the vehicle in motion until the low air pressure warning light goes out and the alarm (buzzer) stops sounding. Air pressure gauges should indicate at least 90 psi. If warnings continue beyond three minutes, and/or pressure gauges do not reach 90 psi, turn the ignition switch and battery switch to OFF positions and notify unit maintenance. Failure to do this could result in injury or death.

23. When raising the vehicle hood, ensure it is secured from falling. Do this by securing the hood retaining bar to the bumper bracket with the safety pin. Failure to do so may damage the vehicle or cause injury or death to personnel

24. All personnel must stand clear of towing vehicle and trailer during coupling and uncoupling operations. Failure to comply with this warning may result in serious injury or death.

25. Before moving trailer, ensure all loose equipment is properly stowed and that nothing will drag on the ground. If trailer is loaded, ensure that load is properly secured. Failure to follow this warning may result in injury to personnel or damage to equipment.

26. If trailer is not coupled to towing vehicle, ensure the trailer wheels are securely chocked. Failure to do so may cause the trailer to roll, resulting in injury to personnel or damage to equipment.

F. ENVIRONMENTAL CONSIDERATIONS.

1. Ensure that all hazardous materials and wastes are stored and labeled properly.

2. Ensure that spill kits are within reach when changing or adding vehicle fluids or in the case of vehicle failures. Spill kits should enable the soldiers to contain a spill on land or in water.

3. Ensure that drip pans remain under parked vehicles.

4. Ensure that containers are the proper size and type for draining vehicle fluids.

G. ADDITIONAL COMMENTS AND INFORMATION. Recommended testing time is 4.0 hours.

NAME _____ RANK _____ DATE _____

Instructions for Test

A. This test consists of 30 multiple choice questions.

B. Read all questions and answers carefully; then write the answer that is MOST correct on the blank line to the left.

C. Any unanswered questions will be scored as incorrect responses.

_____1. In which gear do you start the engine?

a. 1-5.

b. 1-3.

c. "P".

d. "N".

_____2. What should you do when stopping the vehicle with a load?

a. Use the engine as a brake.

b. Downshift the transmission.

c. Use the service brakes.

d. All of the above.

_____3. How do you gain access to the battery compartment?

a. Raise the two-person crew seat.

b. Raise the hood.

c. Open the access door on the right fender.

d. Open the access panel above the right running board.

_____4. The brake system in the M939 series vehicles is --

a. An air over hydraulic system.

b. An air brake system.

c. A hydraulic over air system.

d. A hydraulic system.

_____5. For normal driving conditions, use which transmission gear range?

a. 1-5.

b. 1-4.

c. 1-3.

d. 1-2.

_____6. The recommended method of braking this truck is –

a. Push pedal down hard until the tires start to slide.

b. Continuously apply and release the brake pedal - pump the brakes.

c. Apply brakes gradually when slowing or stopping.

d. Deploy the parachute.

_____7. How many personnel are authorized to ride in the cab?

a. 1.

b. 2.

c. 3.

d. As many as can get in the cab.

_____8. The maximum hard bottom fording depth is how many inches?

a. 30.

b. 36.

c. 40.

d. 48.

_____9. What braking procedure is used when stopping on ice or snow?

a. There is no specific method for applying the brakes.

b. Hit the brake pedal hard.

c. Ride the brakes.

d. Pump the brakes gradually.

_____10. What color will the air cleaner indicator show when it needs servicing?

a. Yellow.

b. Green.

c. Blue.

d. Red.

_____11. The spring brake warning light illuminates when --

a. Spring brakes are not engaged.

b. There is too much tension on spring brake.

c. There is not enough tension on spring brake.

d. Spring brakes are engaged.

_____12. What is the purpose of the slave receptacle?

a. Of no purpose.

b. Hooks up to AC current to play your radio.

c. Is the plug-in point to slave start your vehicle when batteries have become discharged.

d. To power auxillary work lights.

_____13. What is the purpose of the tire davit boom?

a. To hold the spare tire in place.

b. To assist the driver in lifting and guiding the spare tire over the side of the truck.

c. To assist in replacing davits.

d. To raise the truck.

_____14. At what interval must the air tanks be drained?

a. After daily operation.

b. During daily operation.

c. Weekly operation.

d. Monthly operation.

_____15. What sequence and interval is used when performing PMCS?

a. No specific sequence or interval.

b. Any way that gets the job completed.

c. Made in the sequence as listed and at the designated intervals as set forth in the operator's (-10) manual.

d. Conduct weekly checks prior to any daily checks.

_____16. Do not operate the starter continuously for more than how many seconds?

a. 5.

b. 8.

c. 10.

d. 15.

_____17. The air pressure gauge must read how many psi before the warning light goes out and the warning buzzer stops?

a. 30 to 40.

b. 40 to 50.

c. 50 to 60.

d. 90 to 150.

_____18. What is a safe engine oil pressure gauge reading?

a. 15 psi or higher.

b. 10 psi.

c. 5 psi.

d. Any of the above.

_____19. When do you upshift and downshift the transmission selector lever?

a. When you want to.

b. When you reach the bottom of a grade.

c. As necessary whenever driving conditions change.

d. Never.

_____20. What is the maximum safe speed, in MPH, for shifting the transfer shift lever from high range to low range?

a. 42.

b. 32.

c. 30.

d. 22.

_____21. All M939 series vehicles are equipped with what type of hood?

a. A tilt forward hood.

b. A tilt back hood.

c. A split hood.

d. Cab over.

_____22. Which way should the vehicle face when parking in sand or extremely cold weather?

a. Into the wind.

b. No specific way.

c. Away from the wind.

d. Sideways.

_____23. The purpose of the hand throttle is for which one of the following?

a. Engine warm-up and material handling equipment.

b. Highway operation, using it as a “cruise control”.

c. Raising and lowering the heavy hood.

d. Lowering the spare tire.

_____24. Hearing protection is required for --

a. The driver only.

b. The assistant driver only.

c. Anyone working around the vehicle when the engine is running.

d. All the above.

_____25. When the air brake pressure falls below 50 to 60 psi the low air pressure warning light will --

a. Start flashing.

b. Illuminate.

c. Go out.

d. Do nothing.

_____26. The two air pressure gauges found on the M939 series vehicles are --

a. Primary and Secondary.

b. Primary and backup.

c. Secondary and backup.

d. Over and under.

_____27. What is the purpose of the emergency engine stop control?

a. Cuts off fuel to the engine and can be used at anytime.

b. Cuts off fuel to the engine in emergency situations only.

c. Cuts off fuel to engine if fuel pump delivers too much fuel to engine.

d. Disengages the ignition system.

_____28. When does the warning alarm buzzer sound?

a. Only when parking brakes are engaged.

b. The air-brake system pressure drops below 50 to 60 psi or when parking brake is engaged.

c. Only when air-brake system pressure drops below 50 to 60 psi.

d. When spring brakes are applied.

_____29. The transmission selector lever must be in what position to shift transfer case shift lever?

a. “N”.

b. “1”.

c. “5”.

d. In any position.

_____30. How do you accelerate when operating in a sandy environment?

a. Any way.

b. Rapidly.

c. Slowly.

d. Run the engine to 1,500 rpm, then shift the transmission to 1-2.

1. d
2. d
3. a
4. b
5. a
6. c
7. c
8. a
9. d
10. d
11. d
12. c
13. b
14. a
15. c
16. c
17. c
18. a
19. c
20. d
21. a
22. c
23. a
24. d
25. b
26. a
27. b
28. b
29. a
30. c

NAME _____ RANK _____ DATE _____

Instructions for Test

A. This test consists of 30 multiple choice questions.

B. Read all questions and answers carefully; then write the answer that is MOST correct on the blank line to the left.

C. Any unanswered questions will be scored as incorrect responses.

_____1. What is the purpose of the emergency engine stop control?

a. Cuts off fuel to the engine in emergency situations only.

b. Cuts off fuel to the engine and can be used at anytime.

c. Cuts off fuel to engine if fuel pump delivers too much fuel to engine.

d. Disengages the ignition system.

_____2. When does the warning alarm buzzer sound?

a. Only when parking brakes are engaged.

b. The air-brake system pressure drops below 50 to 60 psi or when parking brake is engaged.

c. Only when air-brake system pressure drops below 50 to 60 psi.

d. When spring brakes are applied.

_____3. The spring brake warning light illuminates when --

a. Spring brakes are not engaged.

b. There is too much tension on spring brake.

c. There is not enough tension on spring brake.

d. Spring brakes are engaged.

_____4. The transmission selector lever must be in what position to shift transfer case shift lever?

a. “5”.

b. “1”.

c. “N”.

d. In any position.

_____5. How do you accelerate when operating in a sandy environment?

a. Any way.

b. Rapidly.

c. Slowly.

d. Run the engine to 1,500 rpm, then shift the transmission to 1-2.

_____6. The brake system in the M939 series vehicles is --

a. An air over hydraulic system.

b. An air brake system.

c. A hydraulic over air system.

d. A hydraulic system.

_____7. Hearing protection is required for --

a. The driver only.

b. The assistant driver only.

c. Anyone working around the vehicle when the engine is running.

d. All of the above.

_____8. The maximum hard bottom fording depth is how many inches?

a. 30.

b. 36.

c. 40.

d. 48.

_____9. What is the purpose of the slave receptacle?

a. Of no purpose.

b. Hooks up to AC current to play your radio.

c. Is the plug-in point to slave start your vehicle when batteries have become discharged.

d. To power auxillary work lights.

_____10. For normal driving conditions, use which transmission gear range?

a. 1-5.

b. 1-4.

c. 1-3.

d. 1-2.

_____11. The recommended method of braking this truck is –

a. Push pedal down hard until the tires start to slide.

b. Continuously apply and release the brake pedal - pump the brakes.

c. Apply brakes gradually when slowing or stopping.

d. Deploy the parachute.

_____12. How many personnel are authorized to ride in the cab?

a. 1.

b. 2.

c. 3.

d. As many as can get in the cab.

_____13. What sequence and interval is used when performing PMCS?

a. No specific sequence or interval.

b. Any way that gets the job completed.

c. Made in the sequence as listed and at the designated intervals as set forth in the operator's (-10) manual.

d. Conduct weekly checks prior to any daily checks.

_____14. Do not operate the starter continuously for more than how many seconds?

a. 5.

b. 8.

c. 10.

d. 15.

_____15. What is the purpose of the tire davit boom?

a. To hold the spare tire in place.

b. To assist the driver in lifting and guiding the spare tire over the side of the truck.

c. To assist in replacing davits.

d. To raise the truck.

_____16. At what interval must the air tanks be drained?

a. During daily operation.

b. After daily operation.

c. Weekly operation.

d. Monthly operation.

_____17. The air pressure gauge must read how many psi before the warning light goes out and the warning buzzer stops?

a. 30 to 40.

b. 40 to 50.

c. 50 to 60.

d. 90 to 150.

_____18. What is a safe engine oil pressure gauge reading?

a. 15 psi or higher.

b. 10 psi.

c. 5 psi.

d. Any of the above.

_____19. Which way should the vehicle face when parking in sand or extremely cold weather?

a. Into the wind.

b. No specific way.

c. Away from the wind.

d. Sideways.

_____20. When the air brake pressure falls below 50 to 60 psi the low air pressure warning light will --

a. Illuminate.

b. Start flashing.

c. Go out.

d. Do nothing.

_____21. All M939 series vehicles are equipped with what type of hood?

a. A tilt back hood.

b. A tilt forward hood.

c. A split hood.

d. Cab over.

_____22. The purpose of the hand throttle is for which one of the following?

a. Engine warm-up and material handling equipment.

b. Highway operation, using it as a “cruise control”.

c. Raising and lowering the heavy hood.

d. Lowering the spare tire.

_____23. The two air pressure gauges found on the M939 series vehicles are --

a. Primary and backup.

b. Secondary and backup.

c. Over and under.

d. Primary and Secondary .

_____24. In which gear do you start the engine?

a. 1-5.

b. 1-3.

c. “P”.

d. “N”.

_____25. When do you upshift and downshift the transmission selector lever?

a. When you want to.

b. When you reach the bottom of a grade.

c. As necessary whenever driving conditions change.

d. Never.

_____26. What is the maximum safe speed, in MPH, for shifting the transfer shift lever from high range to low range?

a. 42.

b. 32.

c. 30.

d. 22.

_____27. What should you do when stopping the vehicle with a load?

a. Use the engine as a brake.

b. Downshift the transmission.

c. Use the service brakes.

d. All of the above.

_____28. How do you gain access to the battery compartment?

a. Raise the two-person crew seat.

b. Raise the hood.

c. Open the access door on the right fender.

d. Open the access panel above the right running board.

_____29. What braking procedure is used when stopping on ice or snow?

a. There is no specific method for applying the brakes.

b. Hit the brake pedal hard.

c. Ride the brakes.

d. Pump the brakes gradually.

_____30. What color will the air cleaner indicator show when it needs servicing?

a. Yellow.

b. Red.

c. Green.

d. Blue.

1. a
2. b
3. d
4. c
5. c
6. b
7. d
8. a
9. c
10. a
11. c
12. c
13. c
14. c
15. b
16. b
17. c
18. a
19. a
20. a
21. b
22. a
23. d
24. d
25. c
26. d
27. d
28. a
29. d
30. b

INTERMEDIATE TRAINING OBJECTIVE 2

DRIVER'S PERFORMANCE TEST (ROAD TEST) INSTRUCTIONS

1. GENERAL.

a. This test is to be conducted according to the guidelines set forth in AR 600-55. Also, the specific directions for this test are to be followed without deviation. No omissions or changes in the wording of these directions are permitted.

b. The purpose of the road test is to evaluate the driver's ability to drive safely in most on-the-road situations. It serves as the basis for the issuance of an operator's permit and provides a means for instructional reinforcement and counseling. Driving weaknesses that surface as a result of the test should be called to the attention of the examinee so that specific steps can be taken to eliminate these weaknesses.

c. Final evaluations will be recorded on DA Form 348 (or ULLS generated DA Form 348-E). Once this transfer of information has been accomplished, the completed DA Form 6125-R will be destroyed.

d. The examiner will be a thoroughly qualified operator of the M939 series 5-ton cargo truck. He will also be familiar with the road test route and the testing procedures as set forth in AR 600-55 and this TC. Before administering the test to any examinees, he must practice administering the test to a regular licensed driver qualified on the M939 series vehicles (must be specifically qualified on the model he is driving, such as M923A2 or M923) This practice administration will help him become acquainted with the test route and testing procedures.

NOTE: Operators trained in trailer operations will perform these tests with the trailer connected to the vehicle.

e. The road test will consist of three scored phases: the PMCS test, the vehicle control test, and the on-the-road driving test. The driver will be tested on these phases in the order listed and will not move on to the next phase until successfully passing the previous phase. If the driver fails any phase of the test, the entire road test will be terminated at that point and the examiner will annotate the DA Form 6125-R and conduct an AAR with the driver. This procedure will help to ensure that only safe and proficient drivers get behind the wheel of the M939 series vehicles.

2. SETTING UP THE ROAD TEST. For the road test, the driver drives a predetermined route. To set up the test, the examiner must plan the route to be used. Once a route is established (in a given locality) it should be used for all examinees who are to be tested in the M939 series vehicles. Should it prove necessary to vary the route, care should be taken that the different kinds of route requirements, as well as the number of requirements remain the same. Every road test route will meet the following requirements (to the extent possible):

a. An area to conduct PMCS.

(1) The site should be a flat parking area suitable for heavy vehicles.

(2) There should be at least 8 feet of open space around the vehicle. This will give the driver room to conduct the inspection and the examiner room to observe the driver's inspection performance.

(3) The site should be quiet enough that the examiner can hear the driver explain what he is doing during the inspection.

(4) Avoid using a parking space on a street or any place where traffic is passing close by.

b. A vehicle control test area with the following maneuvers:

(1) Forward stop (see Figure 6-5). Pull vehicle forward through a straight alley and then stop the vehicle so that the frontmost part of the vehicle is within 2 feet of the forward stop line.

(2) Straight line backing (see Figure 6-5). Back the vehicle through a straight alley and then stop the vehicle so that the frontmost part of the vehicle is within 2 feet of the stop line.

(3) Right turn (see Figure 6-6). Drive the vehicle forward about 30 to 50 feet, and then turn the vehicle right around a cone or other point. Bring the rear tires of the vehicle within 18 inches from the cone without touching it.

(4) Alley dock (see Figure 6-7). Pull the vehicle forward past the alley, keeping the alley entrance on the left. Back in a curved path into the alley without touching the sides and stop the rear of the vehicle within 2 feet of the stop line at the rear of the alley.

c. On-the-road driving test with the following maneuvers:

(1) Eight left turns and eight right turns. Include turns at traffic lights, stop signs, and uncontrolled intersections. The turns should range from easy to somewhat difficult for a heavy vehicle. Get a mixture of types of intersections so that they vary in complexity.

(2) A straight section of urban business streets. The section should be 1 to 2 miles long with moderate traffic density. It should contain through intersections and intersections with traffic lights. Try to get a section where the driver can make lane changes somewhere along the route. The section should be one that lets the examiner see how the driver copes with traffic in a typical business area.

(3) Two through intersections and two intersections where a stop has to be made. If possible, these intersections should be included in the urban section.

(4) Two railway crossings. Try to get at least one uncontrolled crossing. The crossing should have enough sight distance for the examiner to see if the driver makes head search movements when approaching each crossing. The driver's attempt to look left and right down the

track will often be the only way to tell if the driver noticed the crossing. If the area does not have any railway crossings, simulate this exercise.

(5) Two curves, one to the left and one to the right. Try to get curves tight enough to produce noticeable off-tracking.

(6) A two-lane rural or semirural road. This section should be about 2 miles long. If there is no rural road near the motor pool, an industrial street with few entrances and a higher speed limit is a good substitute. An undeveloped suburban road is another good substitute. In general, use any road that has characteristics similar to a rural road.

(7) A section of expressway. The section should start with a conventional ramp entrance and end with a conventional ramp exit. The section should be long enough for the M939 series 5-ton cargo truck to make two lane changes. A section of four-lane highway can be used if there is no expressway is available.

(8) A downgrade. The grade should be steep enough and long enough to require gearing down and braking. A steep short hill is the next best choice if a long grade cannot be found. If the local area does not have any steep grades, simulate this exercise.

(9) An upgrade. The grade should be steep enough and long enough to require gear changing to maintain speed. A steep short hill is the next best choice if a long grade cannot be found. If it is hard to find steep grades in the local area, use the same grade for both the downgrade and the upgrade.

(10) A downgrade for stopping. This is a grade where a vehicle can safely stop (or pull off) and park for a minute or so. The grade only needs to be steep enough to cause a vehicle to roll if the driver does not park properly. If the local area does not have any steep grades, simulate this exercise.

(11) An upgrade for stopping. This is another grade where a vehicle can safely stop and park for a minute or so. If needed, use the same grade as was used for the downgrade stop.

(12) One underpass or low clearance and one bridge. The underpass should have a posted clearance height. The bridge should have a posted weight limit. If the local area does not have underpasses or bridges with posted limits, use ones that do not have posted limits. If needed, substitute a bridge for an underpass or an underpass for a bridge. If the local area does not have any low clearances or bridges, look for places that have signs an M939 series vehicle driver should see. Examples of such signs are "No Commercial Vehicles after 11:00 PM" or "Bridge with 12 Ton Weight Limit in 2 Miles."

d. Route design.

(1) When designing a route, try to include all of the specified maneuvers. If there is not an ideal example for a maneuver, find the closest substitute. Do not drop a maneuver because there is not an ideal example. The most important thing is to have a route that tests the driver in as wide a variety of situations as possible.

(2) There is no minimum length for a route and no minimum amount of time that a route must take. A route is acceptable whenever it has all the specified maneuvers. It is a good idea to have at least two routes available so that there is an alternate route if construction or traffic prevents using the primary route.

3. ADMINISTERING THE ROAD TEST.

a. Preventing accidents.

(1) Road tests should normally NOT be given if road or weather conditions present a hazard such as ice, snow, rain, or blowing dust. The exception is when testing is specifically for driving under such conditions.

(2) The examiner must always watch traffic conditions and warn the examinee of dangers which he may not see. If the driver becomes involved in a dangerous or unlawful moving traffic incident or an accident, terminate the test immediately. The examiner will drive the vehicle back to the start point once on-scene responsibilities are fulfilled.

b. Beginning the road test.

(1) Fill in the driver's name and your name (examiner's) on the front of the Road Test Score Sheet. (A sample of a completed DA Form 6125-R is shown in Figure 7-1, page 7-28 and Figure 7-2, page 7-29). A reproducible DA Form 6125-R is located at the back of AR 600-55. Read the following instructions to the driver at the beginning of the test:

DURING THE ROAD TEST, I WILL GIVE YOU DIRECTIONS AS WE GO ALONG.

I WILL ALWAYS GIVE DIRECTIONS FOR TURNS, AND SO ON, AS FAR IN ADVANCE AS POSSIBLE.

THERE WILL BE NO TRICK DIRECTIONS TO GET YOU TO DO SOMETHING ILLEGAL OR UNSAFE.

KEEP IN MIND THAT YOU ARE ALWAYS IN CHARGE OF THE VEHICLE. DO NOT FOLLOW A DIRECTION IF IT TURNS OUT AT THE LAST MINUTE TO LEAD TO AN UNSAFE ACT.

AS WE GO ALONG, I WILL BE MAKING VARIOUS MARKS ON THE SCORING FORM. WHEN YOU SEE THIS, IT DOES NOT NECESSARILY MEAN YOU HAVE DONE ANYTHING WRONG. IT IS BEST FOR YOU TO CONCENTRATE ON DRIVING AND NOT WORRY ABOUT WHAT I AM DOING.

YOUR SCORED TEST BEGINS WITH BEFORE-OPERATIONS PREVENTIVE MAINTENANCE CHECKS AND SERVICES. IF YOU ARE SUCCESSFUL IN THAT PORTION OF THE TEST, YOU WILL PROCEED TO THE VEHICLE CONTROL TEST, AND FINALLY TO THE ON-THE-ROAD DRIVING TEST.

ARE THERE ANY QUESTIONS?

ROAD TEST SCORE SHEET
For use of this form, see AR 600-55; the proponent agency is OCSA

DATE: 7 MAR 97

NAME OF DRIVER	NAME OF EXAMINER
BROOKS, CHARLES	BAJSERT, BRIAN

SSAN	SCORE	ROUTE
000-00-0000	-22	PRIMARY

STOP/START ON GRADE

Approach	Up	Down
Traffic check	⊘	O
Signal On	O	O
Moves to proper lane	O	⊘
Smooth deceleration	O	O
Does not coast to stop	O	O

Stop	
Vehicle parallel to curb	O
Vehicle does not roll	O
Signal off/4-ways on	⊘
Parking brake on	⊘

Resume	
Traffic check	O
4-ways off/signal on	O
Release parking brake	O
Did not stall engine	O
Traffic check	O
Accelerate to traffic fow	O
SEARCH	O
DIRECTION	O
SPEED	O
No errors	-

EXPRESSWAY

Merge On	
Traffic check	O
Signal On	O
Maintains spacing	O
Avoids stopping	O
Smooth merge	O
Cancel signal	O

Lane Changes	Left	Right
Traffic check	O	O
Signal on	O	⊘
Adequate spacing	O	⊘
Smooth lane change	O	O
Cancel signal	O	O

Exit	
Traffic check	O
Signal on	O
Smooth merge to exit lane	⊘
Decelerate in exit lane	O
Adequate spacing	O
Correct ramp speed	O
Cancel signal	O
SEARCH	O
DIRECTION	O
SPEED	O
No errors	-

DRIVING UP GRADE

In proper gear	O
Stays in right lane	O
Uses 4-ways if slow	O
Traffic check	O
SEARCH	O
DIRECTION	O
SPEED	O
No errors	F

DRIVING DOWN GRADE

Clear brakes	O
In proper gear	O
Steady braking on grade	O
Does not ride clutch	H
Maintain steady speed	H
Traffic check	O
SEARCH	O
DIRECTION	O
SPEED	O
No errors	⊘

GENERAL DRIVING BEHAVIOR

Use clutch properly *(to shift, double clutched, didn't ride)*	H
Used gears properly *(not over-rev/lug engine, clash gears, coast)*	H
Used brakes properly *(no hard braking, no riding or pumping brake)*	O
Proper steering *(both hands on wheel, not over/under steer)*	⊘
Obeyed all traffic signs and signals	O
Drove without an accident	O
Never put vehicle over sidewalks, lane markings, stop lines, etc.	O
Examiner was never thrown to left, right, or forward	O
Driver was never forced to take evasive action	O
Wore seat belt	O
Yielded right of way to pedestrians	O
Yielded right of way to other vehicles, as appropriate	O
No errors	-

NOTES

Before-operations PMCS satisfactory.

DA FORM 6125-R, AUG 93 EDITION OF MAR 65 IS OBSOLETE. USAPPC V1.00

LEFT TURNS

RIGHT TURNS

Approach

	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
Traffic check		
Signal on		
Smooth deceleration		
Did not coast to start of turn		
Correct lane to begin turn		

If Vehicle Stops

	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
Gap to vehicle in front		
Not over stop line		
Came to full stop		
Wheels straight ahead		
Stop was necessary		

Turning

	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
Traffic check		
Both hands on wheel		
No gear change		
Proper speed		
Turn not too wide/short		

Completes Turn

	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
Turned into correct lane		
Traffic Check		
Cancel signal		
Accelerated to traffic flow		
SEARCH		
DIRECTION		
SPEED		
No errors		

RAILWAY CROSSINGS

	1	2	3
Checks for trains			
Followed relevant laws			
Did not change gears			
Did not stop on tracks			
No errors			

BRIDGE/UNDERPASS

Know weight limit on bridge	
No error	-
Know clearance of underpass	
No errors	-

CURVES

	Left	Right
Reduce speed on entering		
Maintain speed going through		
Stay in lane		
Traffic check		
No errors	-	

URBAN/RURAL

STRAIGHT SECTIONS

Regular traffic	Urban	Rural
Regular traffic check		
Selects proper lane		
Keeps vehicle in lane		
Adequate following distance		
Appropriate speed		
SEARCH		
DIRECTION		
SPEED		
No errors	-	

LANE CHANGES

	Left	Right
Traffic check		
Signal one		
Adequate spacing		
Smooth lane change		
Cancel signal		
No errors		

INTERSECTIONS

Stopping

	1	2
Traffic check		
Smooth deceleration		
Did not coast to stop		
Gap to vehicle in front		
Not over stop line		
Came to full stop		

Driving Through

	1	2	3	4
Traffic check				
Yields as necessary				
No lane change				
No gear change				
Accelerates to traffic flow				
SEARCH				
DIRECTION				
SPEED				
No errors				

REVERSE OF DA FORM 6125-R, AUG 93

USAPPC V1.00

(2) The road test actually begins when the driver starts his before-operations PMCS. If the driver performs the PMCS to appropriate standards, the examiner will annotate in the NOTES section of the DA Form 6125-R "Before-operations PMCS satisfactory." If he does not perform PMCS to the examiner's satisfaction, the examiner will stop the road test at that point and fail the driver. In this situation, the examiner will annotate "Before-operations PMCS unsatisfactory" in the NOTES section, list specific deficiencies if any, and refer the driver for further training. The examiner will follow the same procedures for grading during- and after-operations PMCS.

(3) If the driver successfully completes the before-operations PMCS, he will proceed to the vehicle control test. It is important to ensure that the driver is proficient in basic vehicle control skills before taking him on the road with other traffic.

(a) Upon arrival at the vehicle control test site, give the driver an overview of all four exercises (forward stop, straight line backing, right turn, and alley dock). Use a diagram of the site to show the driver what to do, and explain that he will get detailed instructions for each exercise as it comes up. When he is ready, the driver gets into the vehicle and proceeds to the first exercise for instructions.

(b) The examiner will evaluate the exercises from the ground and observe the driver's ability to control the vehicle during each maneuver. If the driver demonstrates satisfactory vehicle control skills, the examiner will indicate in the NOTES section "Vehicle control test satisfactory." If the driver is unable to satisfactorily negotiate the course, the examiner will stop the road test and fail the driver at that point. The examiner will indicate in the NOTES section "Vehicle control test unsatisfactory," indicate specific weaknesses if any, and refer the driver for further training.

(4) If the driver satisfactorily completes the vehicle control test, he will proceed to the driving portion of the road test. When the driver is ready, get into the vehicle with the driver and start giving directions for following the road test route. Give the directions in this form: At the (location), make (maneuver). For example, "At the next intersection, turn right," or "At the stop sign, turn left."

(5) If necessary, give combined directions. For example, "Immediately after you complete your right turn, you will have to turn left into that road over there."

(6) Avoid using commercial signs or buildings as landmarks for directions unless there is no alternative. Do not assume that the driver is familiar enough with the area that he knows such landmarks.

(7) Give directions well before the maneuver is to be performed. Always give a direction at a point where the driver can see where he will do the maneuver. However, give the directions close enough to the location so the driver can be sure of where to do the maneuver. For example, do not tell the driver to turn at the next intersection if there is another intersection before the one where you want the driver to turn.

(8) In addition to directions for getting the driver around the route, there are some directions to give for the expressway, urban straight, and rural sections.

(a) At the beginning of the expressway section say, "We will be driving along this expressway for about (2 or however many) miles. When it is safe to do so, make a lane change to the left. Then when it is safe to do so, make a lane change to the right."

(b) At the beginning of the urban straight section, say, "We will be driving along this street for about (2 or however many) miles. When it is safe to do so, make a lane change to the left. Then when it is safe to do so, make a lane change back to the right. When we get near the end of this section, I will tell you what to do next."

(c) At the beginning of the rural section, say, "We will be driving along this road for about (2 or however many) miles. When we get near the end, I will tell you what to do next."

(9) In general, give all directions in a way that avoids distracting the driver. Also, avoid unnecessary conversation.

4. SCORING THE ROAD TEST.

a. The scoring form for the road test is DA Form 6125-R, a two-sided single sheet. (A sample of a completed DA Form 6125-R is at Figures 7-1 and 7-2). A reproducible DA Form 6125-R is located at the back of AR 600-55. The main headings in the boxes give the names of the different maneuvers. Each maneuver has a list of driver behaviors to be scored. Beside each behavior is a letter "O" used for marking the driver for the behavior. In cases where a maneuver is done several times on the route, there is a column of O's for each time the maneuver appears on the route.

b. To score a behavior, draw a stroke through the O whenever the driver's performance is unsatisfactory. Make no mark if the driver performs the behavior correctly. For each maneuver, there is a "No Errors" category at the bottom of the list of behaviors. There is a space beside "No Errors" where you can put a check mark if the driver is satisfactory on all behaviors. These check marks will show that you scored the driver even if the driver made no errors.

c. The only other marking that needs to be done on the test is to indicate maneuvers that were not done. A maneuver might not be done because you missed it for some reason or because there was no opportunity for it on the route. To show that a maneuver was not performed, draw a vertical line down through the entire column of O's used for marking that maneuver.

d. To score the maneuver, follow these steps:

(1) Find the maneuver on the score sheet and be ready to mark it.

(2) Check the driver and the traffic. When the driver can pay attention, give the directions for the next maneuver.

(3) Watch the driver perform the maneuver.

(4) Mark the score sheet.

e. Mark the driver's score sheet immediately after each maneuver. Do not try to remember what the driver did and mark the sheet later on in the route or back at the office.

f. The following paragraphs describe how to mark the score sheet for each type of maneuver:

(1) Stop/start on a grade. There are two columns of O's to mark: one for the upgrade stop and one for the downgrade stop. The columns are labeled "Up" and "Down." The behaviors are organized in three groups: approach, stop, and resume. Score each group separately as the driver does them. Score the approach as soon as the driver comes to a stop. Then check the stop behaviors and score them before telling the driver to continue. After the driver pulls away, score the rest of the behaviors.

(2) Expressway. Score the expressway section in three phases: merge on, lane changes, and exit. Mark each phase as the driver completes it. There are two columns of O's for the lane changes. Mark the one labeled "Left" for the lane change to the left. Mark the one labeled "Right" for the lane change to the right.

(3) Driving upgrade and driving downgrade. Driving up a grade and driving down a grade are scored separately. Observe how the driver handles the grade and score the behaviors listed. It is especially important that the driver uses the proper gear and appropriate signals and speed on grades because these can affect other traffic.

(4) General driving behavior. General behaviors such as gear changing should be marked at the end of the test. Specific actions such as traffic violations can be marked when they happen. There is also space to write notes. Use this space to make notes of things that do not fit into any scoring categories or to record any unusual events during the test. Remember to draw a vertical line through behaviors that are not graded, such as use of clutch when grading on the M939 series vehicle.

(5) Turns. There are eight columns of O's on the left of the box; eight columns of O's on the right (see Figure 7-2). The columns on the left are for left turns. The ones on the right are for right turns. The columns are numbered according to the order in which the turns occur on the route. Column 1 of the left turn columns is for the first left turn on the route, column 2 is for the second turn, and so on. The first few times an examiner uses a route, it is a good idea to write the names of the locations of the turns at the tops of the columns. This will help keep track of the turns until the route is completely memorized.

(a) Mark a turn in four steps: "Approach," "If Vehicle Stops," "Turning," and "Completes Turn." Mark the "If Vehicle Stops" section only if the driver has to make a legal stop before starting the turn, such as at a traffic light, a stop sign, or yield sign. Do not mark this section if the driver stops for some other reason, such as being blocked by other vehicles part way around the turn.

(b) It is important to observe whether the driver is aware of his vehicle position throughout the turn, because it can affect other traffic. If there is more than one left turn lane, the driver should start his turn from the rightmost turn lane.

(6) Railway crossing. This section has three columns for scoring. The ones labeled "1" and "2" are for actual railway crossings on the route. The one labeled "S" is for the simulated crossing. Vehicles transporting passengers or hauling hazardous cargo are required by law to stop between 15 and 50 feet from the nearest railroad crossing and take whatever actions are necessary (for example an open window) to look and listen for trains.

(7) Bridge/underpass. There is one space for marking a bridge and one for marking an underpass.

(8) Curves. There are two columns for scoring curves. The one labeled "Left" is for a curve that turns to the left. The column labeled "Right" is for a curve that turns to the right. Drivers should reduce to a safe speed before entering the curve, then maintain that speed during the curve.

(9) Urban/rural straight sections. This section has two columns. Use the one labeled "Urban" for the urban section. Use the one labeled "Rural" for the rural section. In most cases you will mark the driver when he gets to the end of the section. However, if you see the driver make an error while driving along the section, such as driving in the wrong lane, mark the error as soon as you see it. The driver should drive in the right lane if it is clear or in the center lane if the right lane is blocked or has a large volume of merging traffic.

(10) Lane changes. The column labeled "Left" is for a lane change to the left. The column labeled "Right" is for a lane change to the right. The lane changes are part of the urban section (in addition to the expressway section). Mark each lane change as soon as the driver makes it.

(11) Intersections. There are four columns for marking the driver on intersections. Columns 1 and 2 are for intersections where the driver has to make a legal stop; for example, at a traffic light or a stop sign. Columns 3 and 4 are for marking intersections that the driver goes straight through. There are two phases to marking a stop intersection, stopping and driving through. For a stop intersection, driving through items cover the time from when the driver starts off from the stop to when the driver resumes normal traffic speed. For a driving through intersection, you only mark columns 3 and 4. The urban straight section normally has more than enough intersections to score. Start scoring the intersections as soon as the examinee begins driving along the section. Score stop and through intersections in whatever order they come up in. It does not matter if an intersection with traffic lights is sometimes scored as a stop intersection and sometimes scored as a through intersection.

(12) Search, direction, and speed. Most of the grading blocks discussed above have areas for grading search, direction, and speed in addition to the other behaviors listed. These are general categories which the examiner should be monitoring through each exercise.

(a) Search. At all times during the road test the driver must be constantly checking the front, sides, and rear of his vehicle for traffic, pedestrians, obstructions, emergencies,

and so forth. During each maneuver, the examiner must observe whether the driver is checking around him and yields right of way to other road users when appropriate.

(b) Direction. The driver must be aware of the position of his vehicle at all times. During each maneuver, the examiner must observe the vehicle position in the lane, whether the vehicle is in the correct lane, and whether the driver maintains the appropriate distance from traffic, stop lines, and so on.

(c) Speed. The driver must be aware not only of his speed in comparison with the speed limit, but how his speed affects other traffic. During each maneuver the examiner must watch to see that the driver maintains posted speed limits, accelerates and decelerates smoothly, uses the proper gear for his speed, and blends in with the traffic flow. The examiner must also observe that the driver does not lug or race the engine, coast the vehicle, change gears or brake on tracks or in the middle of intersections, stall the engine, and so forth.

(13) Driver errors at nonmarking locations. Since the examiner scores at predetermined locations, there will be occasions when the driver makes an error at some place other than one of these locations. Score the error in the General Driving Behavior section of the form if appropriate. Otherwise, ignore the error. If the route has a lot of places where the examiner cannot score the driver, the route is probably inefficient. If the driver makes errors in places where the examiner does not score, the driver will likely make errors in places where scoring can be done. Do not decide where to score a driver based on when the driver makes an error. Stick to scoring at the predetermined locations.

5. COMPUTING THE DRIVER'S SCORE.

a. Road test score sheet. At the end of the test, make sure all driver and examiner information is completed. Check that everything is marked clearly and correctly. Be sure to cross out maneuvers that were not done on the test. Review the scored maneuvers for repeated errors and score errors in the general driving behavior. Carefully add the number of marked letter O's and write the total in the "Score" space on the front of the form. A passing score is 25 errors or less. The driver fails the road test if he makes 26 or more errors (errors accumulated on the vehicle control test DO NOT count toward the score on the driving portion of the road test). If the score is close to a failing score, double-check that you have added correctly.

b. Failures. Annotate reason for failure in the Notes section; for example, "Examinee exhibited undue nervousness." The following are some reasons for failures:

(1) Any unsafe driving act.

(2) Failure to properly perform PMCS.

(3) Not knowing location and function of gauges and controls.

(4) Unsatisfactory performance on vehicle control test.

(5) Undue nervousness.

(6) Failure to achieve minimum passing score.

NOTE: If the individual scores 25 errors or less, but the examiner feels that the individual needs additional training, the examiner has the right not to issue a license.

c. After-action review. Whether the driver passes or fails, the examiner will review the results of the road test with him and bring to his attention any weaknesses that require further practice or training. If the driver failed, tell him what caused him to fail. Advise him that an standard Army OF 346 cannot be issued and he will have to retake the entire performance test at a later date. Whether pass or fail, the results must be recorded on the DA Form 6125-R.

INTERMEDIATE TRAINING OBJECTIVE 3

PERFORMANCE TEST - OFF ROAD DRIVING

NAME _____ RANK _____ UNIT _____

EVALUATOR _____ DATE _____

	STEPS	GO	NO-GO
1.	PRESETS THE CTIS SELECTOR TO THE CROSS-COUNTRY (X-C) MODE (M939A2 SERIES).		
2.	SHIFTS THE TRANSFER CASE SHIFT LEVER WITH THE TRANSMISSION IN THE "N" POSITION.		
3.	SHIFTS THE TRANSFER CASE SHIFT LEVER WHEN VEHICLE SPEED IS LESS THAN 22 MPH.		
4.	ALLOWS CTIS AMPLE TIME TO ADJUST BEFORE ENCOUNTERING ADVERSE TERRAIN (M939A2 SERIES).		
5.	ENGAGES FRONT WHEEL DRIVE LOCK-IN ONLY WHEN THE TRANSFER CASE IS IN HIGH RANGE.		
6.	SETS THE TRANSMISSION RANGE SELECTOR TO 1 AS NEEDED.		
7.	ANTICIPATES TERRAIN AND, BEFORE NEGOTIATING, TAKES POSITIVE ACTION TO MATCH CTIS (M939A2 SERIES), TRANSMISSION AND TRANSFER CASE GEAR SELECTION TO TERRAIN FEATURES.		
8.	DOES NOT SHIFT INTO ANY LOWER GEAR THAN IS NECESSARY TO MAINTAIN HEADWAY.		
9.	CHECKS FOR OBSTRUCTIONS/CLEARANCES AND CHOOSES THE BEST ROUTE OF TRAVEL TO AVOID OBSTACLES.		
10.	MAINTAINS CONTROL OF THE VEHICLE.		
11.	MANEUVERS AROUND, NOT OVER OBSTACLES.		

STEPS		GO	NO-GO
12.	DRIVES SLOWLY ENOUGH TO PREVENT TRUCK DAMAGE, LOOSE OR SHIFTING CARGO, AND INJURY TO VEHICLE OCCUPANTS.		
13.	MANUALLY DOWNSHIFTS/UPSHIFTS THE TRANSMISSION PROPERLY WHEN NECESSARY, SUCH AS ON GRADES.		
14.	DOES NOT BACK THE VEHICLE WITH THE TRANSFER CASE IN LOW.		
15.	DOES NOT ALLOW THE VEHICLE TO EXCEED 5 MPH WHEN THE TRANSFER CASE IS IN LOW AND THE TRANSMISSION IS IN “1”.		
16.	ASCENDS/DESCENDS HILLS IN A STRAIGHT APPROACH.		
17.	CROSSES RAVINES AND DITCHES PROPERLY.		
18.	DOES NOT EXCEED THE FORDING DEPTH/SPEED.		